JC10 Rec'd PUT/PTO 2 9 NOV 2001 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

Not yet assigned

Filing Date:

Herewith

Applicant:

Sandbach, et al.

Title:

DATA PROCESSING APPARATUS WITH

REPLACEMENT KEYBOARD

Attorney Docket:

9637-000037

Box PCT

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Applicant herewith submits this Preliminary Amendment to the application filed herewith, for consideration prior to the calculation of the filing fee, as follows:

IN THE SPECIFICATION

Please amend the title of the invention as filed to read:

DATA PROCESSING APPARATUS WITH REPLACEMENT KEYBOARD

Applicant includes herewith an Attachment for Specification Amendment showing a marked up version of the amendment to the title.

IN THE CLAIMS

Please amend Claims 3-5, 7-8, 10-12, and 16-18, in accordance with the

Sandbach Preliminary Amendment Page 2 of 9

following rewritten claims in clean form. Applicant includes herewith an Attachment for Claim Amendments showing a marked up version of each amended claim.

- 3. (Amended) Data processing apparatus according to claim 1, wherein said processing means is configured to:
- (a) perform a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;
- (b) perform a second measurement relating to the position of said mechanical interaction to generate second value; and
- (c) generate said positional data only when said first value is within a predetermined amount of said second value.
- 4. (Amended) Data processing apparatus according to claim 1, wherein said sensor is an XY position sensor, and said positional data corresponds to the position within a continuous area defined by said sensor.
- 5. (Amended) Data processing apparatus according to claim 1, wherein said processing means is configured to measure a parameter of said sensor relating to the pressure applied to said sensor.
- 7. (Amended) Data processing apparatus according to claim 1, wherein said data processing apparatus comprises a hand-held computer.

Control of the last t

A THE ROLL BY THE

one of said processing devices is configured to receive said signals from said input sensor and to generate said positional data and data of said second data type; and

the second of said processing devices is configured to process said positional data and data of said second data type to generate data corresponding to displayable characters.

- (Amended) Data processing apparatus according to claim 8, wherein said first processing device forms part of a keyboard assembly.
- 11. (Amended) Data processing apparatus according to claim 8, wherein said first processing device is configured to generate a stream of data comprising positional data, and to send positional data to said second processing device only when an item of positional data differs from the immediately preceding item of sent data by more than a predetermined amount.
- 12. (Amended) Data processing apparatus according to claim 1, wherein said input sensor forms part of said data processing apparatus, and said input sensor comprises at least two layers of conductive fabric.

Attorney Docket No. 9637-000037

Sandbach Preliminary Amendment Page 4 of 9

- 16. (Amended) A method of processing signals received from an input sensor according to claim 13, wherein said sensor is an XY position sensor, and said positional data corresponds to the position within a continuous area defined by said sensor.
- 17. (Amended) A method of processing signals received from an input sensor according to claim 13, wherein a parameter of said sensor relating to the pressure applied to said sensor is measured, and said positional data is generated by only when said parameter exceeds a predetermined amount.
- 18. (Amended) A method of processing signals received from an input sensor according to claim 13, wherein a stream of data comprising positional data is generated, and an item of positional data is processed to generate data representing a character only when said item of positional data differs from the immediately preceding item of data in said stream by more than a predetermined amount.

REMARKS

Claims 3 - 5, 7 - 8, 10 - 12, and 16 - 18 have been amended. Claims 1 - 2, 6, 9, and 13 - 15 remain unchanged. After acceptance of this Amendment, Claims 1 through 18 will remain pending in the current application. The purpose of this preliminary amendment is to clarify language and remove multiple dependent claims from the application to reduce filing costs. Consideration of the application as amended is requested.

Respectfully submitted,

Attorney for Applicant

Date: 100 29 , 2001

Harness, Dickey & Pierce, P.L.C.

P.O. Box 828

Sand the Roll for the the sand

١Ŋ

Bloomfield Hills, MI 48303

(248) 641-1600

TITLE

The following is a marked up version of the amended title in which underlines indicates insertions and brackets indicate deletions.

DATA PROCESSING APPARATUS WITH REPLACEMENT KEYBOARD

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

- 3. (Amended) Data processing apparatus according to claim 1 [or claim 2], wherein said processing means is configured to:
- (a) perform a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;
- (b) perform a second measurement relating to the position of said mechanical interaction to generate second value; and
- (c) generate said positional data only when said first value is within a predetermined amount of said second value.
- 4. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 3], wherein said sensor is an XY position sensor, and said positional data corresponds

Attorney Docket No. 9637-000037

Sandbach Preliminary Amendment Page 7 of 9

to the position within a continuous area defined by said sensor.

- (Amended) Data processing apparatus according to [any of] claim[s] 1 [to
 4], wherein said processing means is configured to measure a parameter of said sensor relating to the pressure applied to said sensor.
- 7. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 6], wherein said data processing apparatus comprises a hand-held computer.
- 8. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 7], wherein said processing means comprises two processing devices, such that:

one of said processing devices is configured to receive said signals from said input sensor and to generate said positional data and data of said second data type; and

the second of said processing devices is configured to process said positional data and data of said second data type to generate data corresponding to displayable characters.

- 10. (Amended) Data processing apparatus according to [any of] claim 8 [or 9], wherein said first processing device forms part of a keyboard assembly.
- 11. (Amended) Data processing apparatus according to [any of] claim[s] 8 [to10], wherein said first processing device is configured to generate a stream of dataAttorney Docket No. 9637-000037

Sandbach Preliminary Amendment Page 8 of 9

comprising positional data, and to send positional data to said second processing device only when an item of positional data differs from the immediately preceding item of sent data by more than a predetermined amount.

- 12. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 11], wherein said input sensor forms part of said data processing apparatus, and said input sensor comprises at least two layers of conductive fabric.
- 16. (Amended) A method of processing signals received from an input sensor according to claim [any of] claim[s] 13 [to 15], wherein said sensor is an XY position sensor, and said positional data corresponds to the position within a continuous area defined by said sensor.
- 17. (Amended) A method of processing signals received from an input sensor according to [any of] claim[s] 13 [to 16], wherein a parameter of said sensor relating to the pressure applied to said sensor is measured, and said positional data is generated by only when said parameter exceeds a predetermined amount.
- 18. (Amended) A method of processing signals received from an input sensor according to [any of] claim[s] 13 [to 7], wherein a stream of data comprising positional data is generated, and an item of positional data is processed to generate data representing a character only when said item of positional data differs from the Attorney Docket No. 9637-000037

the die to the test test test test test

The first state of the state of

immediately preceding item of data in said stream by more than a predetermined amount.

Rec'd PCT/PTO 13 MAR 2002 09/980172 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

09/980,172

Filing Date:

29 November 2001

Applicant:

Sandbach, et al.

Title:

DATA PROCESSING APPARATUS WITH

REPLACEMENT KEYBOARD

Attorney Docket:

9637-000037

Box PCT

Hon, Commissioner of Patents and Trademarks

Wäshington, D.C. 20231

Attn: Examiner India Evans

And the same

SUPPLEMENTAL PRELIMINARY AMENDMENT

Madam:

Applicant herewith submits this Supplemental Preliminary Amendment to the application filed on 29 November 2001, for consideration prior to the calculation of the filling fee, as follows:

IN THE CLAIMS

Please amend Claim 15 in accordance with the following rewritten claim in clean form. Applicant includes herewith an Attachment for Claim Amendments showing a marked up version of each amended claim.

15. (Amended) A method of processing signals according to claim 13, wherein said method includes the steps of:

Sandbach Preliminary Amendment Page 2 of 4

- (a) performing a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;
- (b) performing a second measurement relating to the position of said mechanical interaction to generate second value; and
- (c) generating said positional data only when said first value is within a predetermined amount of said second value.

Sandbach **Preliminary Amendment** Page 3 of 4

REMARKS

Pursuant to a phone conversation with Examiner Evans on this date, Applicant submits this Supplemental Preliminary Amendment to remove the multiple dependency regarding claim 15. Applicant thanks the Examiner for her consideration in this matter and respectfully requests that the application be allowed as amended.

Respectfully submitted,

Attorney for Applicant

Gregory A. Stobbs, Fleg. No. 28764

13

Date: 13 March 2002

Hamess, Dickey & Pierce, P.L.C.

P.O. Box 828

Bleomfield Hills, MI 48303

(248) 641-1600

Ē 14

Sandbach Preliminary Amendment Page 4 of 4

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

- 15. (Amended) A method of processing signals according to claim 13 [or claim 14], wherein said method includes the steps of:
- (a) performing a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;
- (b) performing a second measurement relating to the position of said mechanical interaction to generate second value; and
- (c) generating said positional data only when said first value is within a predetermined amount of said second value.

IU